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Title Effect of Shaping Parameters of Single- and Double-curvatured Concave Surfaces in Geometric Ray Tracing

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Abstract

Most of the complex aerospace structures can be modeled as hybrid of QUACYLs and QUASORs. Hence the analysis of geometric ray tracing inside is necessary to analyze the RF build-up. Towards this, ray tracing inside different quadric surfaces such as right circular cylinder, GPOR, GPOR frustum of different shaping parameters are carried out and the ray path details are visualized. Finally ray tracing inside a space module, which is a hybrid of a finite segment of right circular cylinder and a frustum of general paraboloid of revolution (GPOR) is reported.